

3123

nerac.com
tech track 

QUESTION NO.- 1021108.002
29 COMPANY PATENT SCOUT
REF # 2108/2

1. Electrophotographic display device and driving method therefor
PAT 05-29-01 06239896 NDN- 217-0406-5429-7

INVENTOR(S)- Ikeda, Tsutomu

PATENT NUMBER- 06239896
PATENT APPLICATION NUMBER- 321717
DATE FILED- 1999-05-28
PATENT DATE- 2001-05-29
NUMBER OF CLAIMS- 9

Best Available Copy

EXEMPLARY CLAIMS- 1
FIGURES- 25
ART/GROUP UNIT- 2873
PATENT CLASS- Invention (utility) patent
INVENTOR COUNTRY/ZIPCODE- JPX
PATENT ASSIGNEE(S)- Canon Kabushiki Kaisha
ASSIGNEE CITY- Tokyo
ASSIGNEE COUNTRY- JPX
ATTORNEY, AGENT, OR FIRM- Fitzpatrick, Cella, Harper & Scinto
U.S. PATENT CLASS- 3592400000
U.S. CLASSIFICATION REFS.- X359241000; X359237000
INTERNATIONAL PATENT CLASS- 7G02F00101
PATENT REFERENCE(S)- Re. 28360; 3612758; 3670323; 3909116; 4126854; 5966233
FOREIGN DOCUMENT REFERENCE(S)- 6-52358; 9-185087; 9-211499
FOREIGN COUNTRY CODE- JPX; JPX; JPX
PATENT APPLICATION PRIORITY- 10-151181
PRIORITY COUNTRY CODE- JPX
PRIORITY DATE- 19980601

An electrophoretic display device exhibiting a memory characteristic, i.e., capable of holding a display state even after removal of an applied voltage, is provided by introducing a mechanism that colored electrophoretic particles are retained in position for display in the absence of an electric field. For the purpose, at least one of a pair of substrates holding therebetween colored electrophoretic particles together with an insulating liquid is provided with a magnetism by disposing a magnetic material on or in the substrate together with the use of magnetized colored electrophoretic particles so as to retain the colored electrophoretic particles in position under the action of a magnetic Coulomb force exerted by the magnetized substrate.

EXEMPLARY CLAIMS- 1. An electrophoretic display device, comprising: a first substrate and a second substrate disposed opposite to each other with a gap therebetween, a first electrode and a second electrode disposed at at least partially deviated positions on the first substrate, a transparent insulating liquid filling the gap between the first and second substrates, and colored electrophoretic particles carried in the insulating liquid so as to be movable between the first electrode and the second electrode, wherein the first substrate has a magnetism, and the electrophoretic particles also have a magnetism.

Question Number: 1021108.002 File: PAT Strategy Date: 09/13/00
NUMBER OF HITS: 1 HIT LIMIT: 100 COPIES: 1

The information contained in this report has been obtained from one or more copyrighted sources under the authority of the copyright owners. No reproduction or further dissemination of this report or its individual articles may be made without the express written consent of NERAC, Inc. in each instance.

Best Available Copy